Republic of Montenegro
AGENCY FOR TELECOMMUNICATIONS
No: 01-1194/1
Podgorica, July 09, 2004

Pursuant to Articles 2, 7 and 13 of the Law on public procurement ("Official Gazette of the Republic of Montenegro", no. 40/2001), the Agency for Telecommunications invites

INTERNATIONAL BIDDING COMPETITION
for the procurement of equipment, devices and a vehicle for a mobile control-measuring station

for which the funds have been allocated in accordance with Article 1 of the Law on public procurement.

A set of documents (tender documents) can be found on the Internet presentation of the Commission for public procurement www.nabavka.cg.yu and the Agency for Telecommunications www.agentel.cg.yu.

1. THE OFFEROR HAS TO SUBMIT:

- a bid for control-measuring equipment, devices and a vehicle in conformity with the specification and technical requirements given in the Annex to this invitation, including:
  a) the conditions for the upgrading of equipment, devices and associated software,
  b) the conditions for services and technical support,
  c) the conditions for training in handling the equipment, devices and associated software to be fulfilled by the offeror and buyer;
- unit and total prices in euros, free Podgorica;
- terms and mode of payment;
- date of delivery;
- guaranty period for the equipment, devices and the vehicle;
- the conditions for regular servicing and repair;
- reference list;
- authorization (certificate, power of attorney or the manufacturer's statement by which the offeror is authorized for the territory of the Republic of Montenegro or State Union of Serbia and Montenegro).

The offeror is bound to itemize his bid.

The offeror may submit a bid for particular items only.

2. CRITERIA FOR THE EVALUATION OF BIDS:

- quality and technical characteristics	30 points
- price	30 points
- terms of payment	15 points
- date of delivery	5 points
- guaranty period and the conditions for regular servicing and repair	10 points
- offeror's references	5 points
- offeror's authorization (certificate, power of attorney or the manufacturer's statement that the offeror is authorized for the territory of the Republic of Montenegro or State Union Serbia and Montenegro)	5 points

The bid has to contain a bank guaranty in the amount of 2% of the amount of the bid, as a guaranty that the bid shall be binding upon the offeror for 60 days after the bid due date.

The Agency for Telecommunications is entitled to accept a bid as a whole or in part.

The selected offeror shall have the references in the selection in the subsequent competition, which will comprise the rest of the system for RF spectrum monitoring in the Republic of Montenegro.

3. SUBMISSION AND OPENNING BIDS:

The bid shall be submitted in Serbian or English, and may be either sent by mail or hand-delivered, in a closed and sealed envelope, with the notice: "Bid for the delivery of equipment, devices and a vehicle for a mobile control-measuring station" and "Do not open before the official opening of bids", to the following address:
The Republic of Montenegro, Agency for Telecommunications, Bulevar Revolucije 1, 81000 Podgorica, Serbia and Montenegro.

The bid is submitted in 4 (four) identical copies.

All suppliers are bound to fill in Form F2341 for the declaration of independence, duly signed and attached as an integral part of the bid. Any bid received after the deadline or incomplete bid will not be examined.

Deadline for the submission of bids is 15 September 2004 , not later than 16.00. The persons in charge of the receipt of bids are Mirko Radovic and Bosko Pejanovic.

Public opening of the submitted bids shall take place on 24 September 2004 at 12:00 on the premises of the Agency for Telecommunications, and may also be attended by authorized representatives of offerors.

Contact person: Ms Dubravka Aleksic
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ANNEX

SPECIFICATION OF THE EQUIPMENT, DEVICES AND VEHICLE WITH TECHNICAL REQUIREMENTS

EQUIPMENT AND DEVICES

1. Antennas:
   - omni-directional antennas for controlling and measuring with a complete coverage of 10 KHz - 2700 MHz frequency range;
   - directional antennas for controlling and measuring with a complete coverage of 80 MHz - 3GHz frequency range;
   - a fixed GPS antenna installed on the vehicle;

   Antennas must be robust, weather protected and suitable for all kinds of field work with 50 Ohm impedance.

2. Antenna tower must provide automatic and/or manual elevation to the height of 10m, where the height can be indicated from the lowest to the highest point. Antenna tower must consist of segments.

3. Azimuth and polarization antenna rotator.

4. Antenna control unit with rotator controller, with manual and software manipulation possibilities, for indoor use.

5. Antenna switch with manual and software manipulation possibilities, for indoor use.

6. Monitoring receiver for frequency range from 10KHz to 3 GHz with manual and software manipulation possibilities, which provides:
   - the measurements of signal characteristics:
     a) measurements of frequency or frequency offset according to ITU-R SM.377;
     b) measurements of field strength or field level, as well as pfd (power flux-density) according to ITU-R SM.378;
     c) measurements of modulation signal characteristic according to ITU-R SM.328 and ITU-R SM.1268;
     d) measurements of emission bandwidth according to ITU-R SM. 443, ITU-R SM.328 and ITU-R SM.1138.

   - spectrum examination, such as:
     a) automatic monitoring of spectrum occupancy according to ITU-R SM.182;
     b) scanning of predefined RF band according to ITU-R SM.182;
     c) scanning of predefined and memorized frequencies or channels according to ITU-R SM.182;
     d) digital demodulation of AM, FM, PM, CW, LSB, USB, ISB, PULSE, IQ;
     e) monitoring of AM, FM, CW and SSB signals (audio monitoring).

   - keeping records of measured values for later use on a PC.

7. Direction finder with an associated set of antennas for direction finding the signals of any modulation and polarization in a frequency range from 0,5MHz to 3GHz, with the possibility of software and manual manipulation.

8. System process controller must be compact and robust, with a high level of resistance to EM interferences, which provides software for RF spectrum monitoring and system management.

9. Software for RF spectrum monitoring and system management must be PC oriented, modular and compatible with the equipment and devices for RF spectrum monitoring.

10. GPS receiver which enables the use of a fixed antenna on the vehicle.

11. Portable monitoring receiver with an associated set of antennas for operation in a frequency range from 10KHz to 3GHz.

VEHICLE

12. Vehicle for the installation of equipment and devices, with the following characteristics:
   - a van;
   - 5-cylinder turbo diesel engine with minimum working capacity (volume) of 2500 cm3 and minimum power of 110 KW (150HP);
   - with a four-wheel drive;
   - internal space separated from the driver's cab, minimum length of 320 cm, minimum width of 170 cm, minimum height of 190 cm;
   - manual transmission system for fieldwork;
   - reinforced back shaft;
   - reinforced vehicle roof for the installation of the antenna tower with a platform;
   - air conditioning of the internal space and the driver's cab from -15^{0}C to +42^{0}C by a device which doesn't significantly burden the alternator of the vehicle;
   - alternator 14V/200A;
   - side sliding door with a window;
   - back door with a step;
   - alarm system and central locking;
   - acoustic isolation from the engine noise;
   - system of fire protection made suitable for the purpose of the vehicle;
   - stereo radio/CD receiver with RDS decoder and loudspeakers.

13. Set for the grounding and lightning protection.

14. Power supply of the equipment and devices with central switch and proper protection, together with the required system of power supply of the vehicle, must provide a stabile supply of the equipment and devices during the measuring, under the three regimes of operation:
   - when the vehicle is on the move;
   - when the vehicle is at a standstill, with its engine on;
   - when the vehicle is at a standstill, with its engine off (continuous power supply with the capacity of 1200VAh and external power supply of 220V AC (50Hz)).

15. Installation of the equipment and devices in the vehicle is to comprise the following:
   - internal space adaptation for two working places (two operators) and placing of antennas, current generator, additional batteries and accessories;
   - antenna tower installation;
   - the installation of the roof platform and outdoor ladder;
   - the performance of the required antenna installation;
   - the performance of the electric power supply installation with electric power switch;
   - other adaptations necessary to complete the function of the mobile control-measuring station.

OTHER TECHNICAL REQUIREMENTS

The offered equipment and devices for MCMS (mobile control-measuring station) must be suitable to be placed in racks, simple for installation and linking into a uniform system, able to work in a computer controlled system.

The offered equipment and devices must require power supply of the 12V DC and/or 220V AC (50 Hz).

Compatibility with equipment, devices and software of other manufacturers shall be an asset.